

ABSTRACT

When color image data ($C1, M1, Y1$) representing a color image is read in S11, the minimum value from among the color values $C1, M1$, and $Y1$ is selected in S12. Next, in S13, black data $K1$ is generated using a black data generating table that corresponds to the color of the minimum value $k = \min(C1, M1, Y1)$ determined in S11. A device and method is provided for generating color data for image formation by converting C, M, Y , data into C, M, Y, K data. The minimum value of the three color values of C, M, Y is selected and, depending on the color of the minimum value, a black data generating table is selected to generated a value for the black color K . The black data generating tables have different black data conversion characteristics from one another and are associated with the three colors of cyan, magenta, and yellow, respectively. In S14, the black data $K1$ obtained in S13 is subtracted from each of the color data $C1, M1$, and $Y1$ to obtain corrected color data $C2, M2$, and $Y2$. In S15, the data $C2, M2$, and $Y2$ are outputted along with the black data $K1$ as four-color data ($C2, M2, Y2, K1$). Accordingly, it is possible to form images of high quality, even when the main color of the image changes, by preventing light or weak color images from appearing messy due to the black color being depicted too strongly and by preventing dark or strong color images from lacking sufficient contrast due to the black color being depicted too weakly.